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Science Highlight: Superconductivity In Fullerenes

Contact: Robert Dinnebier (R.Dinnebier@fkf.mpg.de) or Peter Stephens (peter.stephens@sunysb.edu)

Soccer-ball-shaped molecules called fullerenes can carry electricity with no energy loss - a phenomenon called superconductivity - at temperatures below -387 degrees Fahrenheit. To increase this temperature, and thus make fullerenes' use more convenient for applications in electronics, drug delivery, and nanotechnology, scientists have long assumed that they simply needed to introduce larger and larger atoms inside fullerene compounds. In the April 5 issue of Science, however, scientists working at the NSLS report an unexpected result: When they added molecules of bromoform and chloroform to a fullerene compound, the resulting compound changed its structure. This result contradicts a widely held assumption that the structure remains the same in both pure and "mixed" fullerene compounds, and paves the way to a new understanding of how superconductivity works in these compounds. To learn more about this work, see:

nslsweb.nsls.bnl.gov/nsls/sci&tech/scihighlights fullerene.htm

Synchrotron Science Highlighted On Capitol Hill

Contact: Simon Bare (sbare@uop.com) or Leemor Joshua-Tor (leemor@cshl.org)

In an effort to increase the visibility of the NSLS and that of the three other DOE light sources, the chair and vice-chair of the NSLS users' committee, along with their counterparts from the other light sources, met with officials on Capitol Hill on April 17 and 18. Read the story at:

http://nslsweb.nsls.bnl.gov/nsls/sci&tech/news UEC capitol.htm

Users' Community Service Award to be Presented to Gary Nintzel

Contact: Simon Bare (srbare@uop.com)

Congratulations go out to Gary Nintzel, a member of the NSLS User Science Division Technical Specialists staff. Gary is the first recipient of the NSLS Users' Executive Committee (UEC) Community Service Award. This award is for service, innovation and dedication to users of the NSLS. Simon Bare, Chair of the NSLS UEC, will present the award to Gary at the NSLS Users' Meeting banquet on the evening of May 21. Gary will receive a \$250 gift certificate and his name will be engraved on a plaque that will be on display in the atrium of the NSLS.

http://nslsweb.nsls.bnl.gov/nsls/sci&tech/news UECaward02.htm

NSLS Annual Users' Meeting: May 20-22, 2002

Contact: Lydia Rogers (Irogers@bnl.gov)

Registration is now open for the NSLS Annual Users' Meeting, which will take place May 20-22, 2002. With over 300 attendees registered already, we are on pace to break last year's record attendance. This year will be highlighted by eight workshops, a poster session, and a packed Main Meeting schedule including the Keynote Address by John Marburger and a DOE-BES report by Pat Dehmer. Through the workshops, invited talks, the poster session, and informal interactions, there will be numerous opportunities to learn about new frontiers in synchrotron-based experimentation and how these will impact individual research interests. Full details about the meeting and workshops, and all the latest information, can be found at:

http://nslsweb.nsls.bnl.gov/nsls/users/meeting/Default.htm

Environmental Audit at NSLS on June 6

Contact: Bob Casey (casey@bnl.gov)

On June 6, the NSLS environmental management program will be audited by an 3rd party firm which is conducting a review of the entire BNL program. During these reviews, the auditors typically have visited the experimental floor and often have sought to talk with users about their work and its associated environmental aspects. We will keep everyone posted as the plans for the audit are developed. For more information about the nature of the audit, see:

http://nslsweb.nsls.bnl.gov/nsls/esh/Temp/emfaq-users.htm

Fun with Science on "Take our Daughters To Work Day"

Contact: Lisa Miller (Imiller@bnl.gov)

On April 25, over 20 daughters learned about some of the scientific programs at the NSLS, and even performed their own scientific experiments. The one-day visit was part of the national "Take our Daughters to Work Day." For photos and details, visit:

http://nslsweb.nsls.bnl.gov/nsls/sci&tech/news_daughters02.htm

NSLS 2001 Activity Report now Available

Contact: Nancye Wright (wright1@bnl.gov)

The 2001 NSLS Activity Report is now available in print and on the web. It will be distributed at the NSLS Users' Meeting, May 20-22. To view the online version, see:

http://nslsweb.nsls.bnl.gov/nsls/pubs/actrpt/2001/title_page.pdf

If you are unable to attend the Users' Meeting but would like to receive a printed copy, you can request one online at: http://nslsweb.nsls.bnl.gov/nsls/pubs/actrpt/Default.htm

User Obligations and Reminders

<u>Pre-Registration</u>: All users must pre-register <u>for each visit</u>. http://nslsweb.nsls.bnl.gov/nsls/dbforms/user-regis.asp

Foreign Nationals: All foreign nationals must submit Form BNL-473. Those without active appointments must arrive Monday-Friday by 3 p.m. (no weekends/holidays).

http://nslsweb.nsls.bnl.gov/nsls/users/procedures/foreign.htm

Training: All users who require training/retraining must arrive Monday-Friday by 3 p.m. (no weekends/holidays).

<u>**Publication References**</u>: Users (except proprietary) are obligated to submit references for all published work. http://nslsweb.nsls.bnl.gov/nsls/pubs/pubrefs/Default.htm

Abstracts: Users are obligated to submit abstracts.

http://nslsweb.nsls.bnl.gov/nsls/pubs/abstracts/submit.asp

End of Run Form: All users are asked to complete the End of

Run survey at the end of each experimental run. http://nslsweb.nsls.bnl.gov/nsls/dbforms/end-of-run.asp NSLS e-News is an electronic newsletter from the Information and Outreach Office at the National Synchrotron Light Source, Brookhaven National Laboratory. Feel free to forward this e-News to a colleague. To subscribe or unsubscribe to this list, see:

http://nslsweb.nsls.bnl.gov/nsls/announcements/listservers.htm#ns ls-news

If you would like to suggest a news item, please send a message to nslsinfo@bnl.gov.

The current and past issues of the NSLS e-News are available on the web at:

nslsweb.nsls.bnl.gov/nsls/announcements/nslsonlinenews.htm

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